ABSTRACT

A semiconductor light-emitting element having a structure that does not complicate a fabrication process, can be formed in high precision and does not invite any degradation of crystallinity is provided. A light-emitting element is formed, which includes a selective crystal growth layer formed by selectively growing a compound semiconductor of a Wurtzite type, and a clad layer of a first conduction type, an active layer and a clad layer of a second conduction type, which are formed on the selective crystal growth layer wherein the active layer is formed so that the active layer extends in parallel to different crystal planes, the active layer is larger in size than a diffusion length of a constituent atom of a mixed crystal, or the active layer has a difference in at least one of a composition and a thickness thereof, thereby forming the active layer having a plurality of light-emitting wavelength region whose emission wavelengths differ from one another. The element is so arranged that an electric current or currents are chargeable into the plurality of light-emitting wavelength regions. Because of the structure based on the selective growth, it is realized that the band gap energy varies within the same active layer,

thereby forming an element or device in high precision without complicating a fabrication process.